




Preparations and uses of polyferric sulphate

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PCT No. PCT/GB95/00483 Sec. 371 Date Sep. 18, 1996 Sec. 102(e) Date Sep. 18, 1996 PCT Filed Mar. 6, 1995 PCT Pub. No. WO95/23765 PCT Pub. Date Sep. 8, 1995A process for preparing a polymeric form of ferric sulphate wherein an acidic aqueous solution including ferrous sulphate is oxidized to form ferric sulphate in the solution in an oxidation stage at ambient pressure and in the absence of oxidation catalyst using at least one oxidizing agent. The ferric sulphate is subsequently at least partially hydrolyzed by addition to the solution of at least one base. The ferric sulphate is kept in contact with the base at the temperature selected for a time sufficient for polymerization of the at least partially hydrolyzed ferric sulphate. The polyferric sulphate (PFS) obtained by embodiments of such a process can be used as a coagulant or flocculant in water treatments for decolorizing, purifying or reducing pollutants with improved performance compared to conventional ferric sulphate and aluminium sulphate treatments.

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